



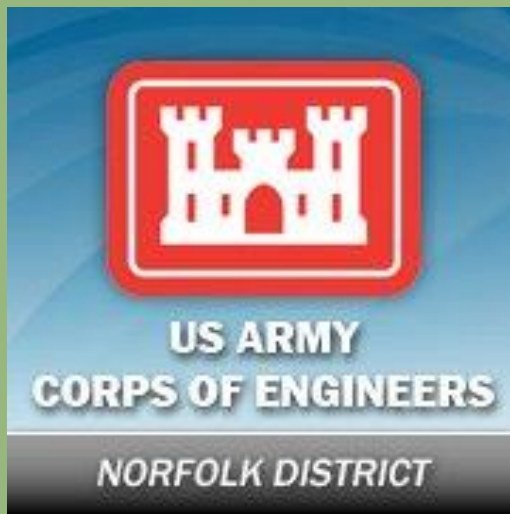
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## Virginia Aquatic Resources Trust Fund – Compensation Planning Framework

Karen Johnson, June 19, 2013

# Virginia Aquatic Resources Trust Fund

- Established by a 1995 Memorandum of Understanding (MOU), amended in 2003.
- New Program Instrument completed in 2011 to comply with the 2008 Federal Mitigation Rule.



## TNC approach to conservation

- Science based
  - Status of biodiversity
  - Habitat condition
  - Current and future threats
  - Socio-political conditions influencing conservation success
- Multiple scales
  - Ecoregional Assessments
  - Conservation Action Plans
- Result = statewide



Conservation by Design

# Conservation Priority Areas - Stakeholders

- Federal Agencies
- State Agencies
- Local Government
- Universities/Research Centers
- Industry
- Non-Governmental Organizations

## **Federal Agencies**

- Atlantic States Marine Fisheries Commission (ASMFC)
- Environmental Protection Agency (EPA)
- Department of Defense – U.S. Army, Fort A.P. Hill
- NASA
- National Oceanic and Atmospheric Administration (NOAA)
- National Park Service (NPS)
- Natural Resources Conservation Service (NRCS)
- U.S. Army Corps of Engineers (ACE)
- U.S. Department of Agriculture Forest Service (USDA-FS)
- U.S. Geological Survey (USGS)
- U.S. Naval Research Laboratory
- U.S. Fish and Wildlife Service (USFWS)


















## **State Agencies**

- Virginia Department of Conservation and Recreation (VDCR)—  
Division of State Parks, Division of Natural Heritage and Division of Soil and Water Conservation
- Virginia Department of Environment Quality (DEQ)
- DEQ-Coastal Resources Management (DEQ-CRM)
- Virginia Department of Game and Inland Fisheries (DGIF)
- Virginia Marine Resources Commission (VMRC)
- Virginia Department of Forestry (DOF)
- Virginia Department of Agriculture and Consumer Affairs (VDACS)
- Virginia Department of Mines, Minerals and Energy (DMME)
- Virginia Outdoors Foundation (VOF)

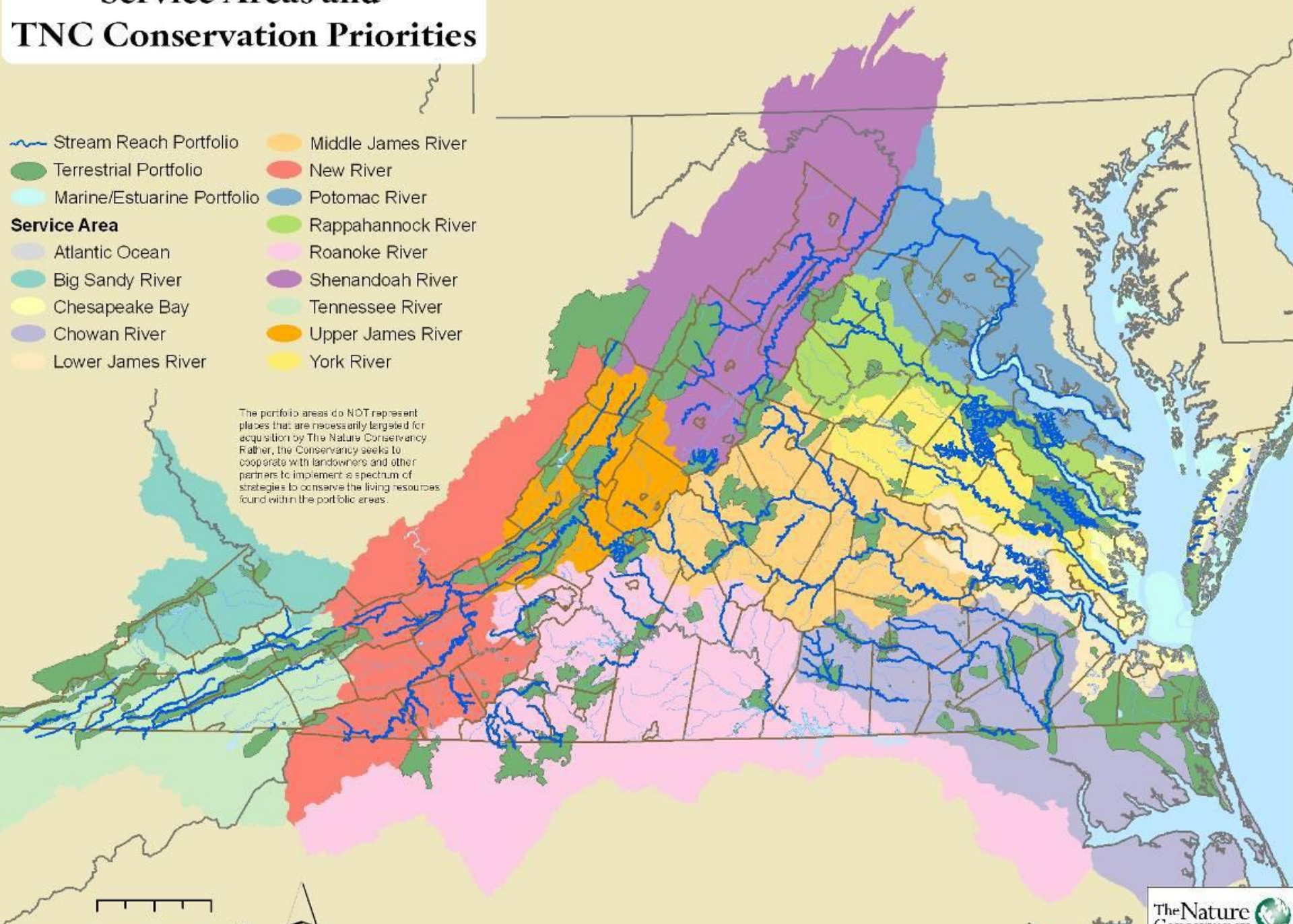
## **Universities/Research Centers**

- College of William and Mary, Center for Conservation Biology (CCB) and Virginia Institute for Marine Sciences (VIMS)
- Old Dominion University (ODU)
- University of Virginia (UVA), Long-Term Ecological Research center
- Utah State University (USU)
- Virginia Commonwealth University (VCU)

# Service Areas and TNC Conservation Priorities

- |  |  |
|--|--|
|  Stream Reach Portfolio     |  Middle James River |
|  Terrestrial Portfolio      |  New River          |
|  Marine/Estuarine Portfolio |  Potomac River      |
| <b>Service Area</b>  |  Rappahannock River |
|  Atlantic Ocean             |  Roanoke River      |
|  Big Sandy River            |  Shenandoah River   |
|  Chesapeake Bay             |  Tennessee River    |
|  Chowan River               |  Upper James River  |
|  Lower James River          |  York River         |

The portfolio areas do NOT represent places that are necessarily targeted for acquisition by The Nature Conservancy. Rather, the Conservancy seeks to cooperate with landowners and other partners to implement a spectrum of strategies to conserve the living resources found within the portfolio areas.



# Compensation Planning Framework - Conservancy Focus

Compensation Planning Framework directs where we search for projects

Developed from TNC priority watersheds and landscapes in cooperation with scientists, conservation partners, experts throughout the state

Existing priorities – formally identified in 2011 Instrument

## THE NATURE CONSERVANCY'S WATERSHED APPROACH TO COMPENSATION PLANNING FOR THE VIRGINIA AQUATIC RESTORATION TRUST FUND



# Compensation Planning Framework – Plan Elements

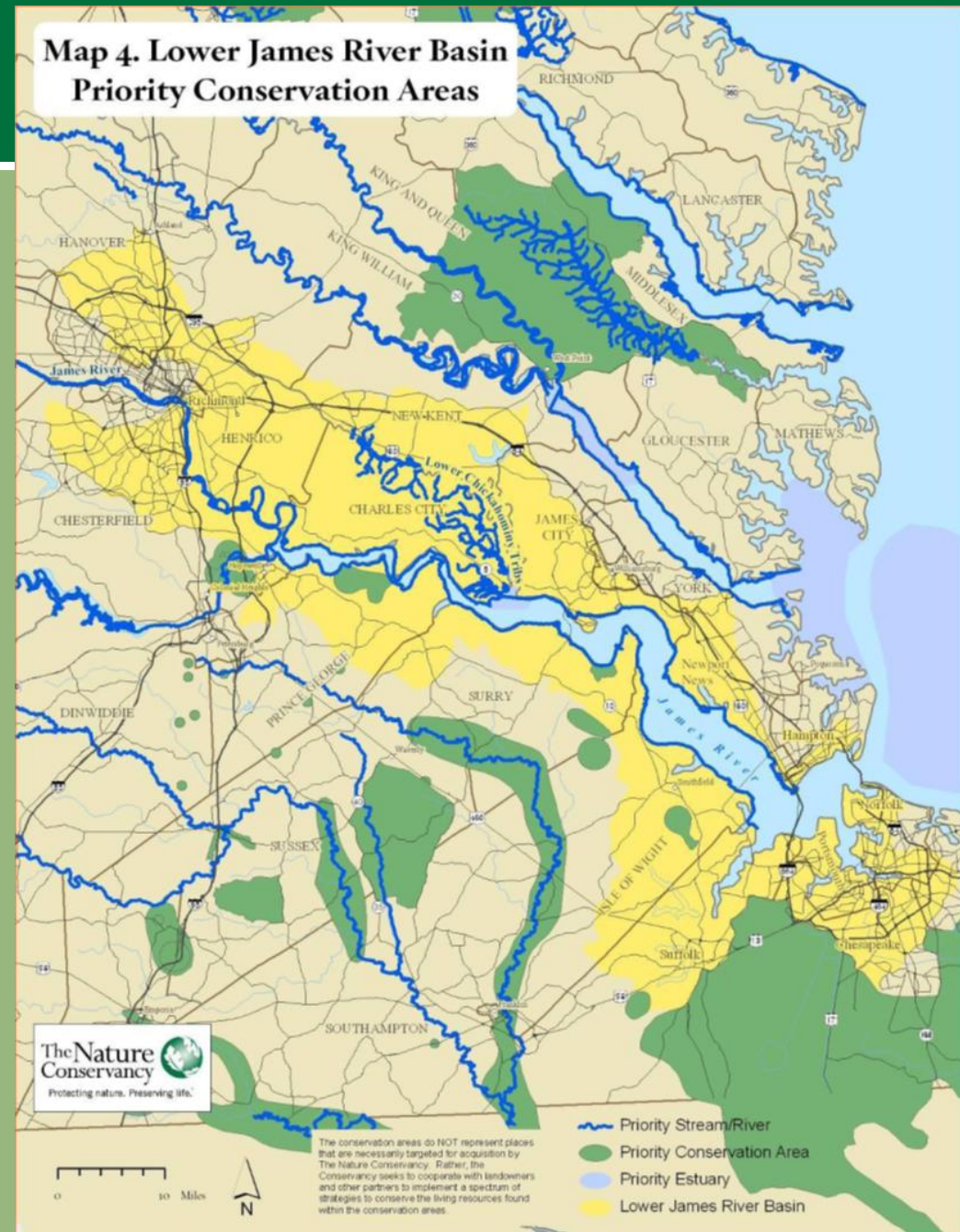
Service Area 1. Atlantic Ocean  
Service Area 2. Chesapeake Bay  
Service Area 3. Chowan River  
Service Area 4. Lower James River  
Service Area 5. Middle James River  
Service Area 6. Upper James River  
Service Area 7. York River  
Service Area 8. Potomac River  
Service Area 9. Shenandoah River  
Service Area 10. Rappahannock  
River  
Service Area 11. New River  
Service Area 12. Roanoke River  
Service Area 13. Tennessee River

For each Service Area  
the plan provides:

- Description of Service Area
- Priority Conservation Areas Listing
- Conservation Targets Description
- Threat Assessment
- Priority Conservation Areas Map

# Threats




- Incompatible residential development
- Global climate change (sea level rise)
- Incompatible forestry practices (silviculture)
- Invasive and/or non-native fish and plant species
- Water Management
- Lack of fire
- Incompatible crop practices (inadequate BMPs)
- Structural impediments to fish passage (dams, clogged culverts, etc.)
- Conversion to agriculture (Active)



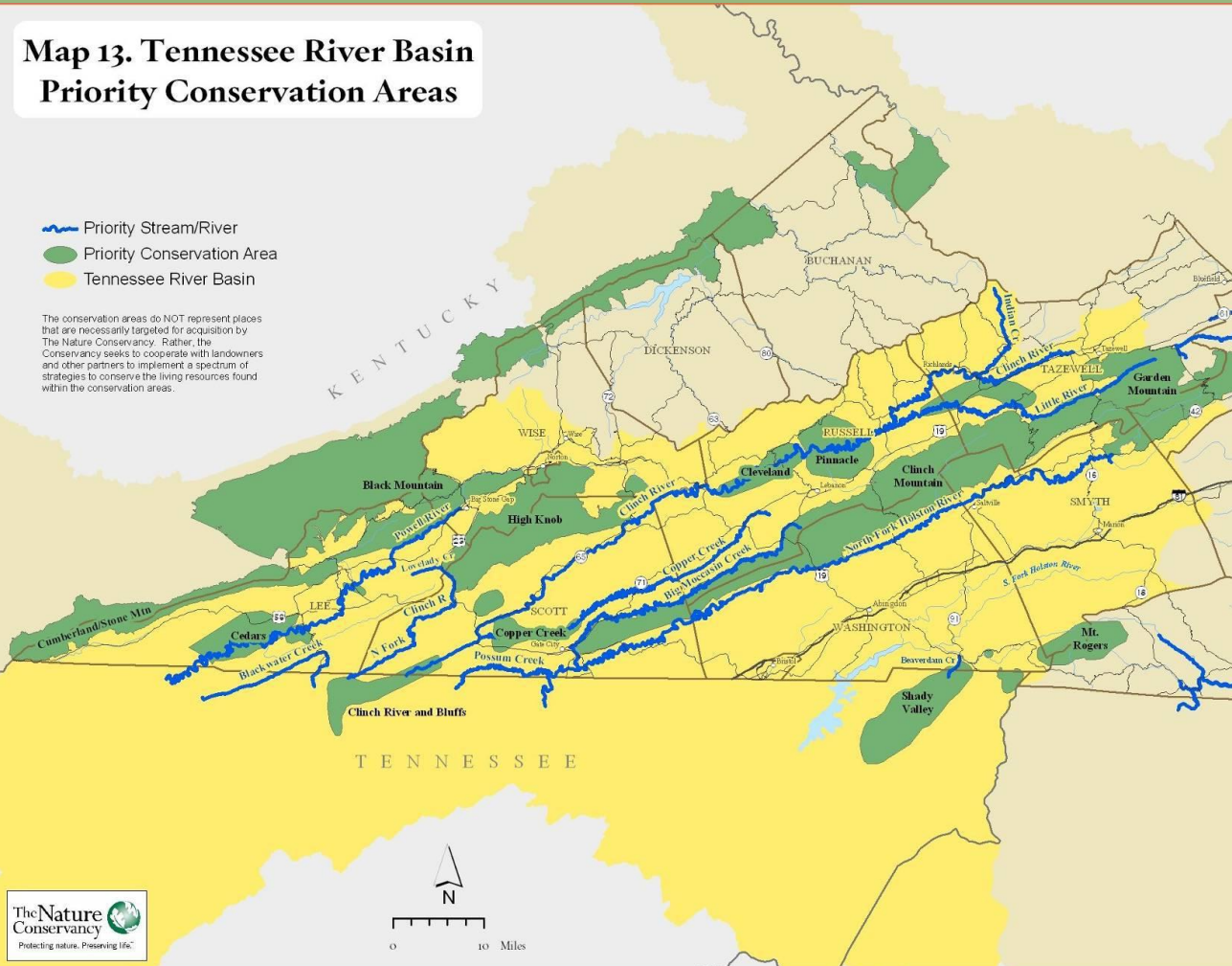


# Compensation Planning - Threats

**Map 13. Tennessee River Basin  
Priority Conservation Areas**

-  Priority Stream/River
-  Priority Conservation Area
-  Tennessee River Basin

The conservation areas do NOT represent places that are necessarily targeted for acquisition by The Nature Conservancy. Rather, the Conservancy seeks to cooperate with landowners and other partners to implement a spectrum of strategies to conserve the living resources found within the conservation areas.



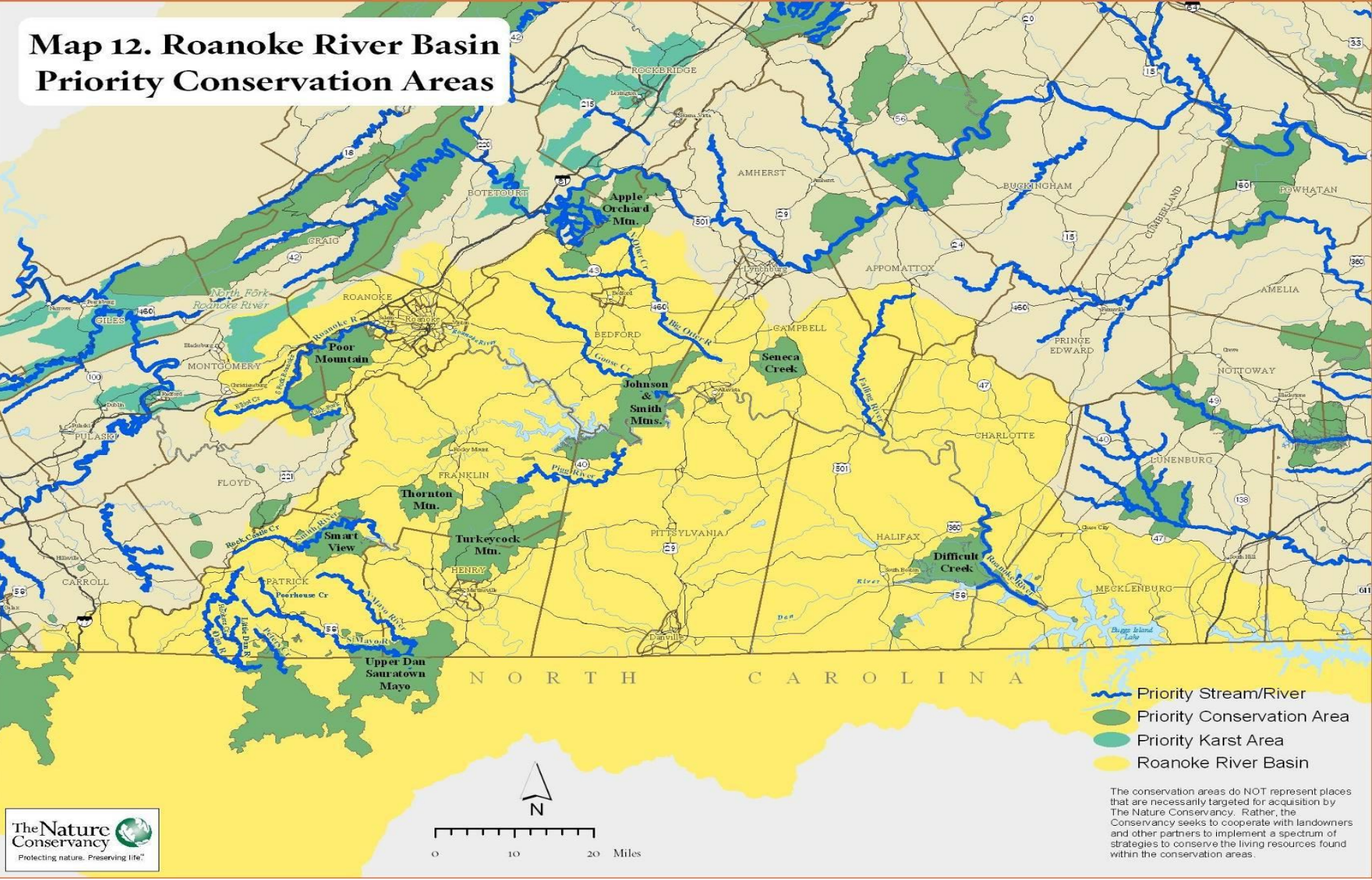
- Incompatible active and legacy mining practices
- Accidental toxic spills
- Incompatible oil and gas extraction
- Inadequate waste water treatment/management
- Energy transmission corridors
- Acid deposition
- Global climate change (air temperature extremes)
- Fire suppression

# Priority Conservation Areas

Name	Type	Acres	Stream Miles
Little Dan River	Aquatic Site		9.91
North Mayo River	Aquatic Site		26.09
North Otter Creek	Aquatic Site		9.01
Smith River	Aquatic Site		25.76
South Fork Roanoke River	Aquatic Site		17.34
South Mayo River	Aquatic Site		39.62
Apple Orchard Mountain	Terrestrial Forest	21001	
	Matrix Block	.6	
Difficult Creek	Terrestrial Forest	36155	
	Matrix Block	.9	
Forks Of The Meherrin	Terrestrial Forest		
	Matrix Block	0.6	
Johnson & Smith Mtns.	Terrestrial Forest		
	Matrix Block	59088	
Northern Blue Ridge Escarpment	Terrestrial Forest		
	Matrix Block	1111.1	

# Roanoke River Priority Conservation Areas

**Map 12. Roanoke River Basin Priority Conservation Areas**



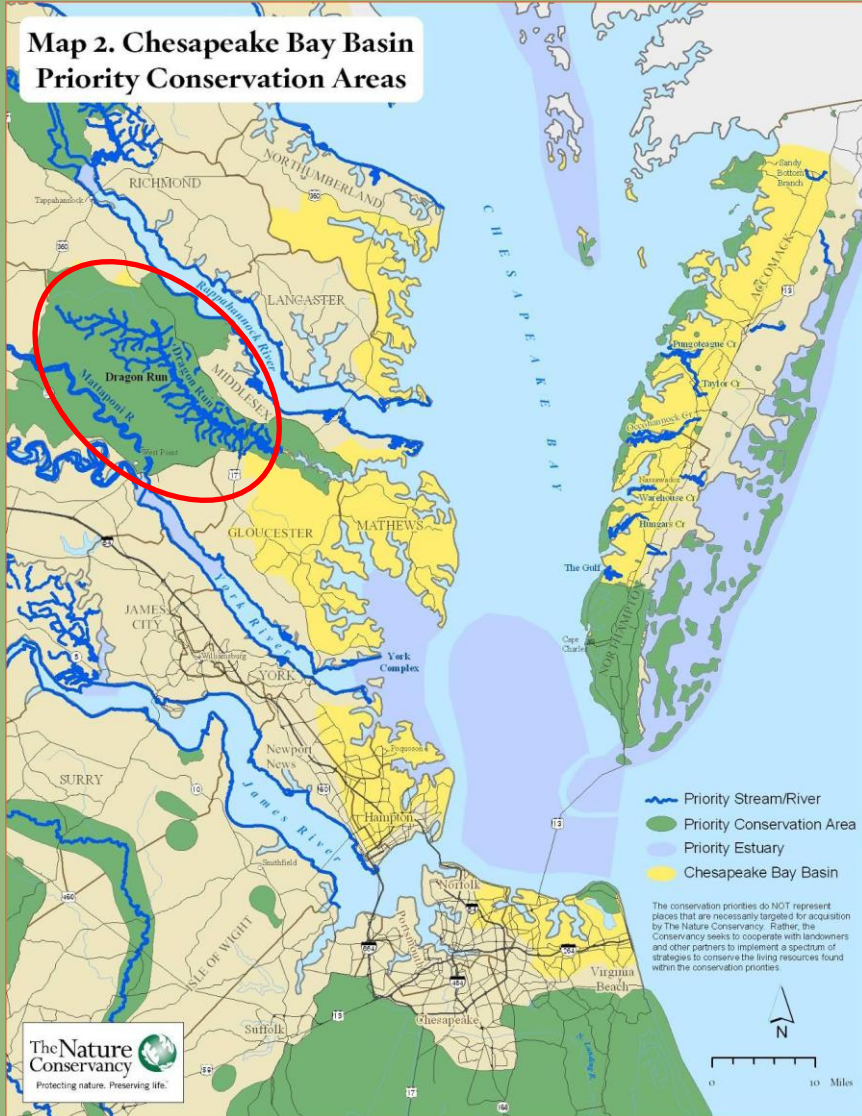
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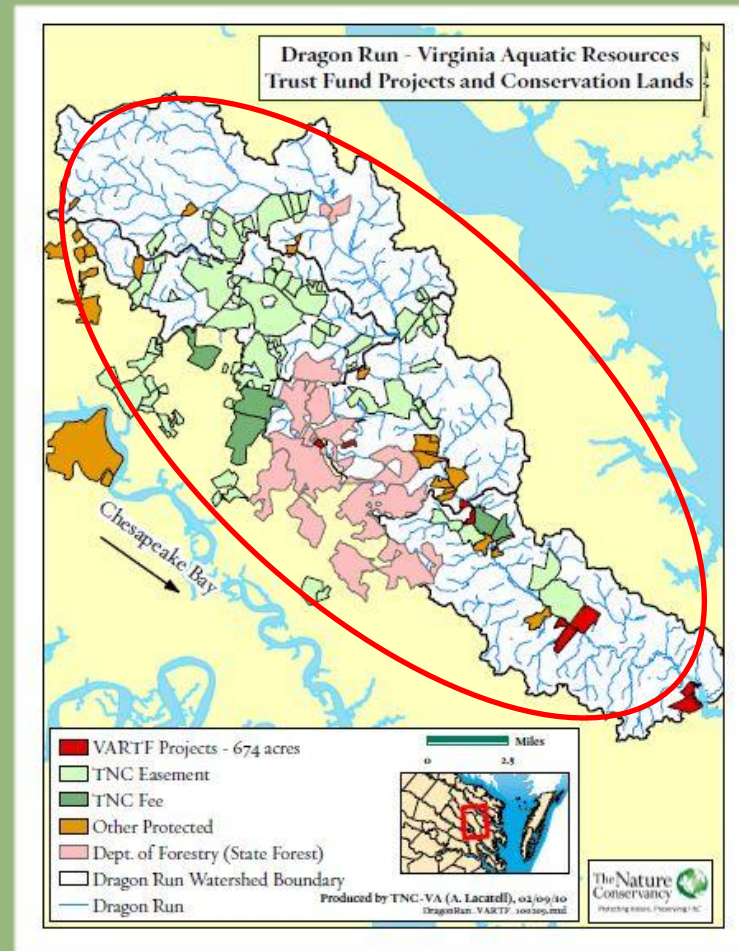


# Compensation Planning Framework – Use

Map 2. Chesapeake Bay Basin  
Priority Conservation Areas



- Dragon Run - bottomland hardwood swamp system



Questions?

[www.nature.org/vartf](http://www.nature.org/vartf)

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